

AUG 28 2006

Application No.: 10/823,136

Case No.: 59095US002

REMARKS

Claims 1-29 are pending. Applicants note with appreciation the indication of allowable subject matter in claims 26 and 27. Reconsideration of claims 1-25, 28, and 29 is respectfully requested in view of the following remarks.

I. Claim 15 Satisfies the Written Description Requirement

Claim 15 stands rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. Specifically, the Office Action alleges that the claim term "at least 0.5 mm" is inconsistent with the phrase "about 0.5 mm to about 5 mm" in the detailed description. Applicants disagree.

The Office Action alleges that Applicants "define" the height as "about 0.5 mm to about 5 mm" at page 7, lines 18-19, of the specification. The cited sentence states:

While the peaks and valley may be of varying heights and depths, the height of peaks 26, or depth of valleys 28, is generally uniform and ranges from about 0.5 mm to about 5 mm, preferably from about 1.5 mm to about 4 mm.

This sentence makes clear that the peaks may be of **varying heights**, and the heights **generally** range from about 0.5 mm to about 5 mm. Nothing in this statement limits the heights to 5 mm for all embodiments of the present invention. Further, the inclusion of claim 15 as an original dependent claim of the present application provides clear support of Applicants possession of the optional limitation "wherein the peaks have a height of at least 0.5 mm". See M.P.E.P. § 2163(II)(A) ("There is a strong presumption that an adequate written description of the claimed invention is present in the specification as filed Consequently, rejection of an original claim for lack of written description should be rare.").

Accordingly, the rejection of claim 15 under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement should be withdrawn.

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II. Claims 1-18, 21-24, 28, and 29 are Not Obvious over Braun et al. (U.S. Pat. No. 5,753,343) in view of Lux (U.S. Pat. No. 5,928,070)

Claims 1-18, 21, 24, 28, and 29 stand rejected under 35 U.S.C. § 103(a) as allegedly obvious over Braun et al. in view of Lux. Applicants request reconsideration of this rejection, because neither the Braun et al. nor Lux, alone or in any proper combination, teach or suggest a nonwoven abrasive article having a plurality of peaks and valleys, and an abrasive coating comprising a binder and abrasive particles.

Applicants' claimed invention relates to an abrasive article comprising a nonwoven substrate having a plurality of peaks and valleys, and an abrasive coating comprising a binder and abrasive particles. As discussed in the prior response, Lux reports a flat nonwoven abrasive article having no peaks or valleys. Applicants' arguments concerning Lux are not repeated herein, but continue to apply.

Braun et al. report a corrugated nonwoven web of polymeric microfiber (NWPM) that is particularly suited for face masks and thermal insulation. Braun et al. report that additives, including abrasive particles, can be added to the NWPM by introducing such components to the fiber-forming molten polymers or by spraying them on the fibers after the NWPM has been collected (column 9, lines 34-40). Significantly, Braun et al. do not teach or suggest an **abrasive coating**, nor the use of their NWPM composite structure for abrasive applications.

At column 9, lines 29-32, Braun et al. incorporate by reference the earlier work of Braun concerning particle-loaded NWPM as reported in U.S. Pat. No. 3,971,373 ("the '373 patent"). In the '373 patent, Braun reports that alumina can be used in face masks to remove noxious vapors (see, e.g., column 1, lines 16-43). The alumina (i.e., "abrasive particles"), is used to remove noxious vapors, not to create an abrasive coating. Contrary to the Office Action's assertion, there is no teaching or suggestion by Braun et al. to make the surface of the web have an abrasive character. Further, one would not expect that a material developed for its filtering capabilities, particularly in the form of a face mask that contacts skin, would have an abrasive coating.

Despite these differences, the Office Action alleges that the claimed invention is obvious in view of Braun et al. because the addition of a binder to the article reported by Braun et al. "is obvious in order to optimize the bonding of the abrasive particles to the web" (Office Action,

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page 4). As reported in the '373 patent, binders compromise the filtering effectiveness of the particles and their ability to interact with the fluids to which they are exposed (see column 1, lines 53-64). For example, binders can cover a portion of the particles and reduce their effective surface area. Accordingly, there is no teaching or suggestion by Braun et al. to create an abrasive coating on their NWPM composite. If anything, the reported negative affects of binders teach away from adding an abrasive coating to their NWPM composite.

Accordingly, the rejection of claims 1-18, 21,24, 28, and 29 under 35 U.S.C. § 103(a) as allegedly obvious over Braun et al. in view of Lux should be withdrawn.

III. Claim 19 is Not Obvious over Braun et al. in view of Lux and further in view of Nollen et al. (U.S. Pat. No. 4,888,091)

Claim 19 stands rejected under 35 U.S.C. § 103(a) as allegedly obvious over Braun et al. in view of Lux and further in view of Nollen et al. Applicants request reconsideration of this rejection, because, as discussed above, neither the Braun et al. nor Lux, alone or in any proper combination, teach or suggest a nonwoven abrasive article having a plurality of peaks and valleys, and an abrasive coating comprising a binder and abrasive particles. Nollen et al. do not remedy the deficiency in attempting to combine the reported teachings of Braun et al. and Lux to obtain Applicants' claimed invention. Accordingly, the rejection of claim 19 as allegedly obvious under 35 U.S.C. § 103(a) over Braun et al. in view of Lux and further in view of Nollen et al. should be withdrawn.

IV. Claim 20 is Not Obvious over Braun et al. in view of Lux and further in view of Braunschweig et al. (U.S. Pat. No. 6,197,076)

Claim 20 stands rejected under 35 U.S.C. § 103(a) as allegedly obvious over Braun et al. in view of Lux and further in view of Braunschweig et al. Applicants request reconsideration of this rejection, because, as discussed above, neither the Braun et al. nor Lux, alone or in any proper combination, teach or suggest a nonwoven abrasive article having a plurality of peaks and valleys, and an abrasive coating comprising a binder and abrasive particles. Braunschweig et al. do not remedy the deficiency in attempting to combine the reported teachings of Braun et al. and

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Lux to obtain Applicants' claimed invention. Accordingly, the rejection of claim 20 as allegedly obvious under 35 U.S.C. § 103(a) over Braun et al. in view of Lux and further in view of Braunschweig et al. should be withdrawn.

V. Claim 25 is Not Obvious over Braun et al. in view of Lux and further in view of King (U.S. Pat. No. 5,626,639)

Claim 25 stands rejected under 35 U.S.C. § 103(a) as allegedly obvious over Braun et al. in view of Lux and further in view of Braunschweig et al. Applicants request reconsideration of this rejection, because, as discussed above, neither the Braun et al. nor Lux, alone or in any proper combination, teach or suggest a nonwoven abrasive article having a plurality of peaks and valleys, and an abrasive coating comprising a binder and abrasive particles. King does not remedy the deficiency in attempting to combine the reported teachings of Braun et al. and Lux to obtain Applicants' claimed invention. Accordingly, the rejection of claim 25 as allegedly obvious under 35 U.S.C. § 103(a) over Braun et al. in view of Lux and further in view of King should be withdrawn.

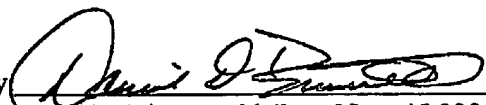
VI. Conclusion

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested. The Examiner is invited to contact Applicants' undersigned representative with any questions concerning the present application.

Respectfully submitted,

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Date

By



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